

Review

The application of the public health model in pregnancy coaching for preventing high-risk pregnancy

Sri Wahyuni,^{1,2} Apriliani Yulianti Wuriningsih,² Nursalam,³ Yuni Sufyanti Arief³

¹Doctoral Program of the Faculty of Nursing, Airlangga University, Surabaya, Indonesia; ²Lecturer of the Faculty of Nursing, Universitas Islam Sultan Agung, Semarang, Indonesia; ³Lecturer of the Faculty of Nursing, Airlangga University, Indonesia

Abstract

Introduction: Primary Health Care which is part of the Public Health Model can be applied through Pregnancy Coaching to prevent high-risk pregnancies.

Design and Methods: This study was conducted using the literature review and Meta-Analysis (PRISMA) method.

Results: A total of 152 articles were obtained from different databases consisting of Scopus 7, Pro-Quest 24, Science Direct 39, Pub Med 25, EBSCO 57 and were analyzed by excluding articles using PICOS. The data collection was restricted to pregnancy, pregnancy coaching, research-relevant interventions, outcomes, and article that are not systematic reviews, hence, the analysis obtained 20 relevant articles.

Conclusion: Primary Health Care which is part of the Public Health Model aimed at reducing new cases is applicable to pregnant women in preventing high-risk pregnancy by optimizing health cadres.

Introduction

A high-risk pregnancy is a dangerous condition for both mother and fetus as it triggers an increase in maternal and fetal mortality. Data from the World Health Organization (WHO) shows that the number of pregnant and childbirth women who die daily is 810 and 75% is due to the various complications experienced.¹ Several disorders can occur due to high-risk pregnancies that affect maternal problems in the perinatal period such as the occurrence of premature labor, as well as the birth of babies with low weight which has the potential to increase morbidity and mortality, hence, a high-risk pregnancy needs more attention.²

Various examinations are generally carried out at least 6 times in a normal pregnancy period, but in pregnancies with risks referral is necessary.³ The usual practice by the community generally is to visit health care facilities for a pregnancy check-up at least 4 times every month in one pregnancy period.⁴ The waiting period for antenatal checkups needs to be monitored regularly to ensure that the health conditions of the mother and baby are in a good

state to reduce associated risks.⁵

Monitoring can be optimized through mentoring from the closest people who can always remind and increase the mother's motivation to reduce anxiety and prevent risks associated with pregnancy.⁶ Furthermore, mentoring carried out by an individual with special skills can prevent the occurrence of risks in pregnancy. Meanwhile, the primary prevention model in the Public Health Model developed by Degreeld Caplan (2001) mentioned that primary prevention can be performed by special identification of high-risk groups through health promotion targeted at building an adaptation process by optimizing supporting resources and community social potential. Optimizing community potential resources in the form of companions for pregnant women can reduce the risk of pregnancy.⁷

Assistance can be provided through Pregnancy Coaching, a method of mentoring for pregnant women performed by health workers. The assistance provided can increase the knowledge of pregnant women and improve Self Efficacy.⁸ Assistance to pregnant women can reduce complications as well as maternal and infant mortality per annum.⁹ Assistance by the closest person who understands health and care efforts in high-risk pregnancies helps the mother to scale through pregnancy safely and comfortably.¹⁰

The education provided by the pregnancy companion instills a deep awareness and enables the mother to be independent in recognizing the health problems, this is known as Self-efficacy. Achieving independence and optimizing self-potential to prevent high-risk pregnancy can be carried out through the care for pregnant women. Efforts by service providers include the provision of antenatal care which increases the self-efficacy during pregnancy.¹¹ Antenatal care services provide various kinds of health checks for the mother and fetus as well as health consultations. A previous study showed that the mother's health condition can be optimized through regular antenatal care.¹²

Design and Methods

This study used is a literature review and Meta-Analysis (PRISMA) checklist as a formulation in the systematic review methodology. It focused on topics or variables using results that

Significance for public health

Primary Health Care which is part of the Public Health Model aimed at reducing new cases can be applied to pregnant women in preventing high-risk pregnancy by optimizing health cadres. Meanwhile, pregnancy coaching consisting of trained health cadres can be an extension of the Primary Health Care to provide assistance. The coach is the closest person to pregnant women and is given the responsibility to monitor, provide education, and ensure the maintenance of their health and the fetus. The existence of pregnancy coaching contributes positively to government programs as one of the efforts to achieve Sustainable Development Goals (SDGs), namely the third goal of good health and welfare. Pregnancy Coach participates in ensuring a healthy life and well-being for all pregnant women.

have been published in international journals on databases such as Scopus, ProQuest, Science Direct, PubMed, and EBSCO with the keywords: Pregnancy Coaching, Pregnancy, Public Health Model, Primary Care, Self-Efficacy.

The inclusion criteria of this Systematic Review include international journals related to the study variables from various databases, as well as studies focused on Pregnancy Coaching interventions, Effects or impacts of giving Pregnancy Coaching, Qualitative, Pre-experimental and Systematic/Literature reviews, Articles published from 2017 to 2021, English language journal, Full-text, and focused on the Implementation of the Public Health Model through Pregnancy Coaching as an Effort to Prevent High-Risk Pregnancy.

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analysis) method was used after data collection to find articles that are consistent with the inclusion criteria as demonstrated in Figure 1. Literature review began with searching for the most relevant journals, reading abstracts, and recording important points of quotation or information that is systematically arranged to easily retrieve the sources.¹³ Each journal selected based on the inclusion criteria is identified in the form of a summary table.

Results and Discussions

Table 1 describes the Literature Review performed to obtain data on the Public Health Model through Pregnancy Coaching as an Effort to Prevent High-Risk Pregnancy. The analysis results of 20 literature showed that both Ha or the alternative hypothesis were accepted, which signifies that pregnancy coaching effectively prevents high-risk pregnancies. The results were categorized into 4 groups with a breakdown of 4 journals focused on pregnancy educator, 6 on prenatal care, 6 on virtual pregnancy coaching, and 4 on public health or peer coach.

Public Health Model

The Public Health Model (PHM) basedn on Gerald Caplan is related to prevention interventions developed in basic services in the community, mental health services, basic treatment, prevention, and care that requires social support to overcome crises through three levels of prevention, namely primary prevention, secondary, and tertiary.^{14,15} Primary prevention in public health in the form of actions to promote health such as the education that focuses on the entire population, while secondary prevention aims to reduce disturbances in the community with a focus on the population at risk, and tertiary prevention is an effort that emphasizes

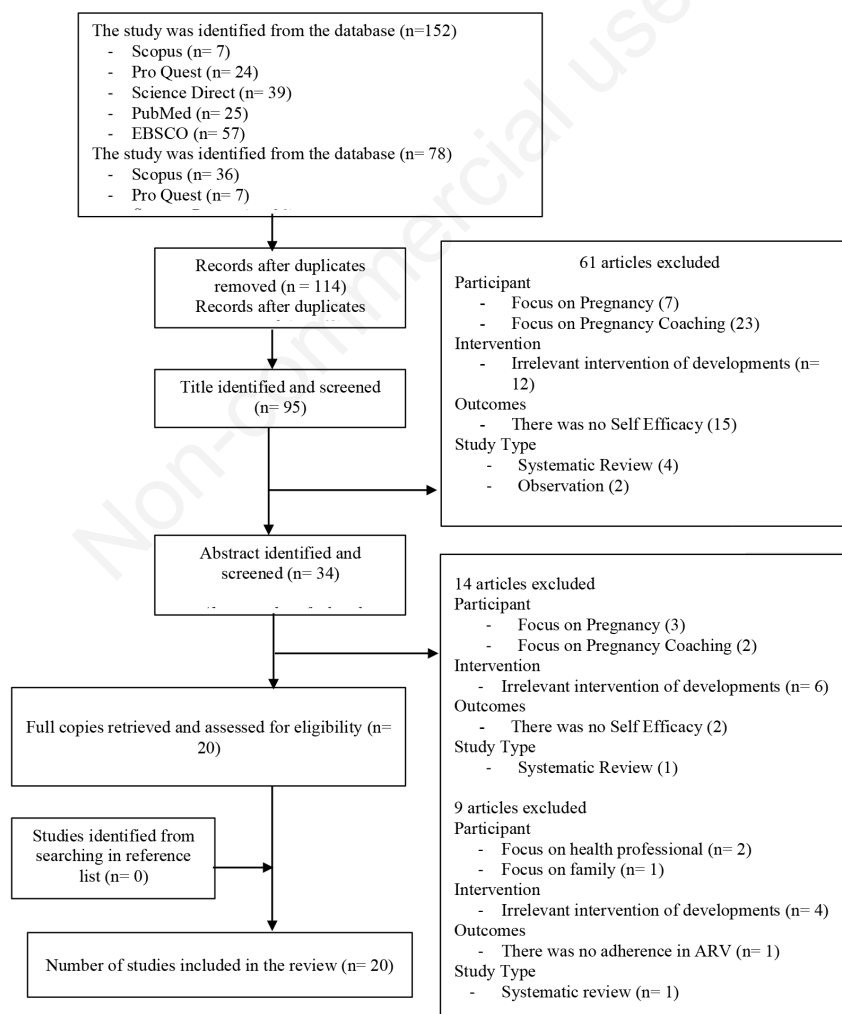


Figure 1. PRISMA chart search flow.

the population suffering from a disease with the goal of reducing damage through rehabilitation to increase productivity.¹⁵ The three preventive measures in pregnancy are prioritized using a primary prevention approach as a form of vigilance to reduce the incidence of risky pregnancies.¹⁶ Primary prevention which aims to reduce new cases, as well as community education using available resources, and strengthening individual abilities are important components of the mentoring method.¹⁷

Prenatal Care

Pregnancy is a maturational crisis in women that stimulates physical and psychological changes.¹⁸ Hormonal changes also have the potential to trigger a high risk of various disorders that accompany pregnancy.¹⁹ These risks have dangerous impacts and lead to complications, including maternal and fetal death.¹ Therefore, intensive monitoring and care of pregnancy are needed as a form of vigilance to prevent the occurrence of complications.

Awareness of high-risk prevention can be achieved by increasing knowledge through various pregnancy classes.²⁰ Antenatal care is usually scheduled for a minimum number of 6 visits during pregnancy.²¹ Through periodic antenatal care, the health condition of the mother and fetus will be monitored continuously for early detection of possible hazards to pregnancy.²² Considering the contribution of antenatal check-ups to the prevention of high-risk pregnancies, there is a need for public awareness and special assistance on health conditions during pregnancy. The new thing from this study is optimize the closest community to pregnant women who have been given special training to become a pregnancy coaching.

Pregnancy Coaching

Pregnancy Coaching is an antenatal care program offered to mothers as part of prenatal care to provide education and monitor their health status.¹⁷ Assistance is very necessary considering that pregnancy stimulates physical, psychological, and behavioral changes that affect the health condition.²³ Furthermore, the Ministry of Health of Indonesia in 2020 stipulates that antenatal checks be carried out at least 6 times during pregnancy.³ This is because regular antenatal care enables early detection of possible health problems in pregnancy.²⁴ The waiting period for the antenatal care schedule can be optimized with Pregnancy coaching . Pregnancy coaching is a companion for pregnant women who have been given training beforehand so that they have the skills to provide education and provide motivation to always maintain a healthy pregnancy, carry out routine checks and be aware of risks in pregnancy. The waiting period for the antenatal care schedule can be optimized with Pregnancy coaching through education and counseling that can increase motivation, confidence, and independence in making decisions on health issues.²⁵ Pregnant women who undergo a mentoring period tend to have self-confidence and increased self-efficacy. This is consistent with a previous study which stated that the education provided during pregnancy significantly increased self-efficacy in both mothers accompanied by their husbands and those unaccompanied.²⁶

Self maternal confidence is the mother's confidence in her ability to provide care and be able to meet all the needs of herself and her baby. Self-efficacy is a perception and belief in one's abilities, it influences a person's ability to motivate themselves in taking an action to overcome obstacles, problems, and stressors.²⁷⁻²⁹ For pregnant women, self-efficacy provides confidence in overcoming problems during the pregnancy period and preparing for childbirth as well as the associated new role. Furthermore, good self-efficacy will reduce individual stress and improve the quality of maternal health during pregnancy. Self-efficacy is related to maternal success in the perinatal period. Increased self-efficacy is

also positively correlated with successful pregnancy and average vaginal delivery.³⁰⁻³¹

Self-efficacy can be formed by four main sources, namely performance achievement, experience, verbal persuasion, and the source of information. Self-confidence is formed when each component can be optimized to increase the confidence and motivation of pregnant women. Low self-efficacy has an impact on maternal anxiety. This is consistent with a previous study which stated that anxiety occurs due to the new roles in primigravida.³²⁻³³

Self efficacy can be improved by increasing the knowledge of pregnant women specifically through mentoring or pregnancy coaching. A previous study found an increase in the efficacy and parenting ability in caring for babies among mothers who marry at an early age with pregnancy coaching. Moreover, understanding the health conditions during pregnancy will reduce individual stressors on the health of mothers and their fetuses. It was also reported that high self-efficacy in pregnant women improves healthy behavior and compliance with health worker recommendations which lead to better perinatal conditions and prevent the emergence of high risks in pregnancy.³⁴⁻³⁵

Correspondence: Sri Wahyuni, Faculty of Nursing, Sultan Agung Islamic University JL. Kaligawe Raya Street Km.4. Semarang. Central Java. 50112, Indonesia, E-mail: wahyuni@unissula.ac.id

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Conclusions

Primary Health Care which is part of the Public Health Model aimed at reducing new cases is applicable to pregnant women in preventing high-risk pregnancies. Furthermore, education efforts are carried out by optimizing community resources as companions or Pregnancy Coaching. Pregnancy Coaching provides education and monitoring continuously for pregnant women to ensure that the health condition of the mother and fetus is monitored properly. This can be carried out optimally by involving health cadres given that they are the community resources closest to pregnant women.

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